

In the Claims:

Kindly cancel claims 1-15 and 18-20 without prejudice or disclaimer. Add new claims 25-30, and amend claim 16 as follows.

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1 / 16. (amended) A method of diagnosing a risk of developing insulin resistance comprising determining the level of human or mouse Mal1 transcripts or polypeptide in a tissue sample, wherein an increase in the level of said transcripts or said polypeptide in said tissue compared to a normal control tissue indicates that said human or mouse is at risk of developing insulin resistance.

2 / 25. (new) The method of claim 16, wherein said method comprises determining the level of a human Mal1 transcript.

3 / 26. (new) The method of claim 16, wherein said method comprises determining the level of a human Mal1 polypeptide.

C² 27. (new) The method of claim 25, wherein said human Mal1 transcript comprises nucleotides 49-456 of SEQ ID NO: 4.

28. (new) The method of claim 26, wherein said human Mal1 polypeptide comprises SEQ ID NO: 3.

4 / 29. (new) The method of claim 16, wherein said method comprises determining the level of a mouse Mal1 transcript.

5 / 30. (new) The method of claim 16, wherein said method comprises determining the level of a mouse Mal1 polypeptide.